AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for starting a group of enterprise servers belonging to a cluster of enterprise servers, the method comprising:

registering modifications to configuration data in a hierarchical data object, the configuration data defining a cluster of enterprise servers, the cluster having a plurality of groups of enterprise servers and a central database accessible to the plurality of groups of enterprise servers, the configuration data in the hierarchical data object stored within the central database;

receiving~~, in an enterprise server in a group of enterprise servers, the group belonging to a cluster of enterprise servers, the cluster having a central database accessible to the group of enterprise servers,~~ a notification that ~~binaries and/or configuration settings related to the cluster and stored within the central database~~ modifications to the configuration data have been ~~modified~~ registered;

comparing ~~binaries and/or configuration settings~~ configuration data stored within a local file system of each enterprise server with the modified ~~binaries and/or configuration settings related to the cluster and~~ configuration data in the hierarchical data object stored within the central database ~~accessible to the group of enterprise servers~~ to identify any binaries and/or configuration settings in the configuration data stored within the local file system which are out-of-date as compared to the binaries

and/or configuration settings in the modified configuration data in the hierarchical data object related to the cluster and stored within the central database;

if the binaries and/or configuration settings in the configuration data stored within the local file system are out-of-date as compared to the ~~modified~~ binaries and/or configuration settings in the modified configuration data in the hierarchical data object related to the cluster and stored within the central database, then updating the ~~modified~~ binaries and/or configuration settings in the configuration data stored within the local file system from the binaries and/or configuration settings in the modified configuration data in the hierarchical data object related to the cluster and stored within the central database ~~to the local file system~~ prior to starting each enterprise server in a group of enterprise servers; and

starting each enterprise server in the group of enterprise servers using the updated binaries and/or configuration settings in the configuration data stored within the local file system.

2. (Currently amended) The method as in claim 1 wherein the hierarchical data object comprises a cluster data object at the root of the hierarchical data object, the cluster data object including:

a global settings object containing global configuration data associated with all enterprise servers in the plurality of groups of enterprise servers in the cluster, and

an instance settings object containing server-specific configuration data associated with a specific enterprise server in a group in the plurality of groups of enterprise servers in the cluster, the server-specific configuration data including server layout information uniquely identifying each specific enterprise server in the group and/or parameters associated with each

specific enterprise server in the group,

the method further comprising:

initiating a boot process for a group of enterprise servers to be started based on bootstrap binaries and parameters contained in the global settings object; and

generating a list of servers within the group to be started based on the server layout information ~~retrieved from the central database~~contained in the instance settings object~~, the server layout information uniquely identifying each server in the group and/or parameters associated with each server in the group~~.

3. (Canceled)

4. (Canceled)

5. (Original) The method as in claim 1 wherein the group of enterprise servers comprises an instance of enterprise servers.

6. (Original) The method as in claim 5 wherein the instance of enterprise servers comprises at least one dispatcher and two or more server nodes.

7. (Original) The method as in claim 1 wherein the servers within the group comprise Java 2 Enterprise Edition ("J2EE") servers.

8. (Currently amended) A system for starting a group of enterprise servers belonging to a cluster of enterprise servers, the system comprising:

a central database for storing a hierarchical data object, the hierarchical data object including binaries and configuration settings associated with a group of enterprise servers belonging to a cluster of enterprise servers;

receiving logic to receive a notification that the binaries and configuration settings associated with the group of enterprise servers belonging to the cluster of enterprise servers as stored within the central database in the hierarchical data object have been modified;

bootstrap logic to compare binaries and/or configuration settings stored within a local file system of each enterprise server with the modified binaries and/or configuration settings stored within the central database in the hierarchical data object to identify any binaries and/or configuration settings stored within the local file system which are out-of-date,

wherein if the binaries and/or configuration settings stored within the local file system are out-of-date, then the bootstrap logic updates the ~~modified~~ binaries and/or configuration settings stored within the local file system from the modified binaries and/or configuration settings stored within the central database in the hierarchical data object ~~to the local file system~~ prior to starting each enterprise server; and

startup and control logic to start each enterprise server in the group of enterprise servers using the updated binaries and/or configuration settings stored within the local file system.

9. (Currently amended) The system as in claim 8 wherein the hierarchical data object stored in the central database comprises a cluster data object at the root of the hierarchical data object, the cluster data object including:

a global settings object containing global configuration data associated with all enterprise servers in the plurality of groups of enterprise servers in the

cluster, and

an instance settings object containing server-specific configuration data associated with a specific enterprise server in a group in the plurality of groups of enterprise servers in the cluster, the server-specific configuration data including server layout information uniquely identifying each specific enterprise server in the group and/or parameters associated with each specific enterprise server in the group,

and further wherein said bootstrap logic comprises group bootstrap logic and node-specific bootstrap logic, the system further comprising:

group bootstrap logic to generate a list of enterprise servers within the group of enterprise servers to be started based on the server layout information retrieved from the instance settings object in the hierarchical data object in the central database~~, the server layout information uniquely identifying the node-specific bootstrap logic, wherein the node-specific bootstrap logic comprises startup and control logic associated with each server in the group and/or parameters associated with each server in the group~~.

10. (Canceled)

11. (Canceled)

12. (Original) The system as in claim 8 wherein the group of enterprise servers comprises an instance of enterprise servers.

13. (Currently amended) The system as in claim 12 wherein the instance of enterprise servers comprises at least one dispatcher and two or more

~~sever~~ server nodes.

14. (Original) The system as in claim 8 wherein the servers within the group comprise Java 2 Enterprise Edition ("J2EE") servers.

15-21. (Canceled)

22. (New) An article of manufacture for starting a group of enterprise servers belonging to a cluster of enterprise servers, comprising:

a machine-readable medium on which is stored a plurality of machine-executable instructions which, when executed, perform a method comprising:

registering modifications to configuration data in a hierarchical data object, the configuration data defining a cluster of enterprise servers, the cluster having a plurality of groups of enterprise servers and a central database accessible to the plurality of groups of enterprise servers, the configuration data in the hierarchical data object stored within the central database;

receiving a notification that modifications to the configuration data have been registered;

comparing configuration data stored within a local file system of each enterprise server with the modified configuration data in the hierarchical data object stored within the central database to identify any binaries and/or configuration settings in the configuration data stored within the local file system which are out-of-date as compared to the binaries and/or configuration

settings in the modified configuration data in the hierarchical data object related to the cluster and stored within the central database;

if the binaries and/or configuration settings in the configuration data stored within the local file system are out-of-date as compared to the binaries and/or configuration settings in the modified configuration data in the hierarchical data object related to the cluster and stored within the central database, then, prior to starting each enterprise server in a group of enterprise servers, updating the binaries and/or configuration settings in the configuration data stored within the local file system from the binaries and/or configuration settings in the modified configuration data in the hierarchical data object related to the cluster and stored within the central database; and

starting each enterprise server in the group of enterprise servers using the updated binaries and/or configuration settings in the configuration data stored within the local file system.

23. (New) The article of manufacture as in claim 22, wherein the hierarchical data object comprises a cluster data object at a root of the hierarchical data object, the cluster data object including:

a global settings object containing global configuration data associated with all enterprise servers in the plurality of groups of enterprise servers in the cluster, and

an instance settings object containing server-specific configuration data associated with a specific enterprise server in a group in the plurality of groups of

enterprise servers in the cluster, the server-specific configuration data including server layout information uniquely identifying each specific enterprise server in the group and/or parameters associated with each specific enterprise server in the group, and

wherein the method performed further comprises:

initiating a boot process for a group of enterprise servers to be started based on bootstrap binaries and parameters contained in the global settings object; and

generating a list of servers within the group to be started based on the server layout information contained in the instance settings object.

24. (New) The article of manufacture as in claim 22 wherein the group of enterprise servers comprises an instance of enterprise servers.

25. (New) The article of manufacture as in claim 24 wherein the instance of enterprise servers comprises at least one dispatcher and two or more server nodes.

26. (New) The article of manufacture as in claim 22 wherein the servers within the group comprise Java 2 Enterprise Edition ("J2EE") servers.